OPEN ACCESS

GAVIN PUBLISHERS

Journal of Tropical Medicine and Health

Case Report

Kumanan T, et al. J Trop Med Health: JTMH-137.
DOI: 10.29011/JTMH-137. 000037

Extensive Tumoral Calcinosis of Elbow

Thirunavukarasu Kumanan[1*], Sujanitha V[2], Pirasath S[3], Rajendra S[4], Gobishangar T[5], Jenil A A[6]

[1]Teaching Hospital, University Medical Unit, Sri Lanka

[2]Consultant Physician and Senior Lecturer, Sri Lanka

[3] Registrar, University Medical Unit, Sri Lanka

[4] Consultant Surgeon and Senior Lecturer, University Surgical Unit, Sri Lanka

[5]Consultant Orthopedic Surgeon Teaching Hospital, Jaffna, Sri Lanka

[6] Consultant Radiologist, General Hospital, Sri Lanka

[*]**Corresponding author:** Thirunavukarasu Kumanan, Teaching Hospital, University Medical Unit, Sri Lanka. Tel: +94777324924; Email: mtkumanan@gmail.com

Citation: Kumanan T, Sujanitha V, Pirasath S, Rajendra S, Gobishangar T, et al. (2018) Extensive Tumoral Calcinosis of Elbow. J Trop Med Health: JTMH-137. DOI: 10.29011/JTMH-137. 000037

Received Date: 09 October, 2018; **Accepted Date:** 22 December, 2018; **Published Date:** 28 December, 2018

Introduction

Tumoral Calcinosis is a painless per articular mass around the large joints and is caused by a hereditary metabolic dysfunction of phosphate regulation. We reported a case of tumoral calcinosis in a 13-year-old girl who presented to us with gradually increasing elbow swelling of 5 years' duration.

Keywords: Elbow Joint; Tumoral Calcinosis

Case Report

A 13 years old girl presented with pain and swelling of the right elbow of one-week duration. She had recurrent episodes of soft tissue infections over this swelling since the age of 8years. She had no significant past or family history. Physical examination showed tender hard mass around the elbow restricting the range of movements of right elbow. She had features suggestive of acute inflammation favoring a diagnosis of cellulitis and treated with parenteral antibiotics. Her serum free calcium, serum albumin, vitamin D level and serum creatinine were well within normal limits while the serum phosphate level was high (7.2 mg/dl). Her FBC showed polymorphonuclear leucocytosis (82%). Raised erythrocyte sedimentation rate and CRP were suggestive of an acute inflammatory process. Plain X ray of elbow joint showed large lobulated calcified masses around the elbow (Figure 1). No intra-articular extension or bony erosions were noted.

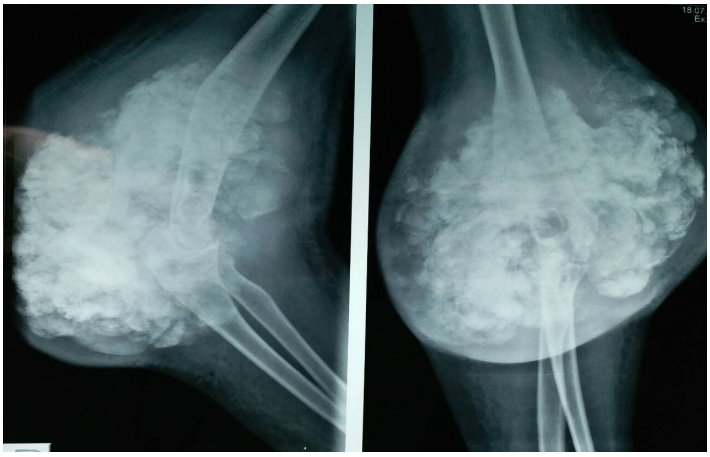

Figure 1: The X ray of elbow joint showed large lobulated calcified masses around the elbow.

Discussion

Tumoral Calcinosis is a benign, metabolic, distinct clinical and histological entity, common among adolescents [1]. It is manifested as slow progressive tumor of large subcutaneous deposits of calcium phosphate near large joints. Increased renal tubular reabsorption of phosphate leading to hyperphosphatemia is the primary underlying mechanism for tumoral calcinosis [2]. Hyperphosphatemia, elevated serum 1,25-dihydroxyvitamin D

levels with normal Serum calcium, parathormone, ALP and renal function are common laboratory findings [3]. Multiple rounded opacities separated by radiolucent lines are the typical radiographic findings [4]. Complete excision of the tumor is the treatment of choice. Inchlan described Tumoral Calcinosis as disease of its own entity in 1943. More than 800 cases of this disease were described in the literature [5]. The young age of our patient together with the presence of slow growing, periarticular swellings over a span of 5 years, with restriction of joint mobility, chalky-white discharge, spotty periarticular soft-tissue calcification on x-rays, normal serum calcium, PTH and renal function, high serum phosphorus allowed us to make the clinical diagnosis of Tumoral Calcinosis and treat the patient successfully. This diagnosis should be kept in mind while evaluating similar periarticular swellings of children and adolescents.

References

1. Savaci N, Avandduk MC, Tosun Z (2000) Hyperphosphatemic tumoral calcinosis. Plast Reconstr Surg 205: 162-165.
2. Zerwekh JE, Sanders LA, Townsend J, Pak CY (1980) Tumoral calcinosis: evidence of concurrent defects in renal tubular phosphorus transport in 1-alpha, 25-hydroxycholecalciferol synthesis. Calcif Tissue Int 32: 1-6.
3. Lyles KW, Halsey DL, Friedman NE, Lobaugh B (1988) Correlation of serum concentrations of 1,25-dihydroxy vitamin D, phosphorus and parathyroid hormone in tumoral calcinosis. J Clin Endocrinol Metab 67: 88-92.
4. Steinbach LS, Johnston JO, Tepper EF, Honda GD, Martel W (1995) Tumoral calcinosis: radiologic-pathologic correlation. Skeletal Radiol 24: 573-578.
5. Farzan M, Farhood AR (2011) Tumoral Calcinosis: What is the treathment? Report of two cases of different types and review of the literature. Am J Orthop 40 : 170-176.